

John D. Bowker
1811 Fort Duquesna Drive
Sun City Center, FL 33573-5035
(813) 633-1427

May 21, 1999

DOCKET FILE COPY ORIGINAL

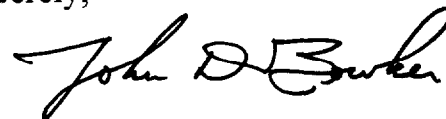
Secretary
Magalie Roman Salas
Office of the Secretary
TW-A306
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Ref: MM Docket No. 99-25

An original and four (4) copies of Comments in the referenced matter are respectfully submitted herewith.

In addition, a 3.5 inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows has been submitted to Paul Gordon at the Commission and to the International Transcription Service, Inc. in accordance with instructions in this proceeding.

Sincerely,



Enclosures

No. of Copies rec'd
List ABCDE

044

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of) MM Docket No. 99-25
Creation of a) RM-9208
Low Power Radio Service) RM-9242

COMMENTS OF JOHN D. BOWKER

The writer rises in qualified support of the Commission's proposals for a Low Power Radio Service.

SECTION I: INTRODUCTION

1. Bowker will develop the following positions herein:

- a) LPFM should be operated as a non-commercial radio service licensed only to not-for-profit corporations. Please see Paragraph 4.
- b) LPFM should be a Secondary Radio Service with stations limited to a maximum facility of 100 Watts ERP at an antenna height of 30 meters HAAT. Please see Paragraph 6.
- c) LPFM stations should not be viewed as competitors of existing broadcast stations, but more as an extended "PSA File" for communicating local news, live coverage of local association or town meetings, and enrichment of local lifestyle. Please see Paragraph 7.

2. Bowker is a retired physicist with over 40 years background in radio broadcast operations and technology. He has been involved with a number of AM and FM broadcast operations since the mid-1970's, and with the construction, operation and management of Class D ("10 Watt") FM stations for educational institutions. As an employee of RCA, Bowker was responsible for the licensing of all RCA and NBC radio licenses granted by the Commission from 1976-1987 and as owner of the Frequency Management company prepared and monitored the broadcast and satellite radio licenses for the General Electric Company.

3. Throughout these Comments, Bowker will show how an LPFM radio service can serve a communications need that commercial radio broadcast stations can not possibly satisfy. The two services should not be viewed as competitors. LPFM should not be an entertainment broadcast service in the usual sense; rather it should convey news and information such as a church service, a live broadcast of a town or neighborhood association meeting, a program of enrichment for a small ethnic community, or even a repetitious review of upcoming events for a retirement community,

SECTION II: COMMENTS - Part 1

Development of Specific Positions:

4. LPFM should be operated as a non-commercial radio service licensed to not-for-profit corporations only.

a) Based on experience with three non-commercial radio broadcast operations Bowker sees how such a sponsoring corporation can rally to support its broadcast operations and closely monitor the balance of programs, all of which represent the institution to the local community. This is quite different from a commercial operation where the sponsorship of time slots often changes several times an hour.

b) If commercial operations are permitted for the LPFM radio service, chain stores could seize the opportunity to tie up a channel for the repetitious announcements of that day's special offerings in every community in which they operate. Quickly there would be no available channels in many towns and cities for the more needed communications such as detailed in Paragraph 3 above.

4c) Bowker recognizes the enthusiasm of many individuals for LPFM access, but questions the lasting commitment that an individual can bring to an assignment of limited radio spectrum.

d) A Not-For-Profit Corporation by its very charter reflects responsibility for its actions and suggests an element of permanence. The corollary, an unincorporated organization (or an individual), has no formal public responsibility to uphold and offers no assurance of future existence as a licensing entity.

5. No one corporation should be permitted to license more than one operating channel in a given community (or market) since, otherwise, one licensee could apply for every available channel to the exclusion of others.

6. LPFM should be a Secondary Radio Service with stations limited to a maximum facility of 100 Watts ERP at an antenna height of 30 meters HAAT.

a) At this time the LPFM Radio Service should be regulated as a Secondary Radio Service. This represents a balance between the urgent need for such stations and the uncertainty of technological developments soon before us such as digital, IBOC or other, direct satellite radio, etc.

b) We are to assume that some form of digital radio system will shortly be authorized and, at such time, if an LPFM facility causes harmful interference, it should move to another channel or return its license to the Commission and leave the air. All LPFM licensees would recognize this as part of their authorization. The investment in an FM station of up to 100 Watts, after all, should not represent a substantial financial issue for any bona-fide corporation.

6c) It is the writer's experience that real concern of people about most local issues rarely extends beyond the range of an LP100 station as described by the Commission at NPRM ¶30. In communities in which the writer has lived and worked, (in Vermont, New York City, New Jersey, Florida) the "pressing issues" were of concern to residents much more closely packed than in a 7-mile diameter. School, highway and other local government matters were generally of concern to people within a township or housing district. Commercial stations were quick to broadcast their take on issues covering a larger region. The writer therefore sees no benefit of LPFM stations covering a larger range than that proposed for an LP100 radio service.

7. LPFM stations should be used for communicating local news, notices of upcoming local events, and enrichment of local lifestyle only.

a) Throughout the press discussion of LPFM, the premise that LPFM will compete with commercial radio broadcasting has prevailed. This should not be the case. Commercial radio is designed to entertain and inform its listeners who can tune in over a relatively large area; LPFM should only be used to inform its more monolithic community of listeners.

b) The writer now resides in a retirement community of 14,000 population of average age 72. A central problem is conveying essential community news to our residents; a weekly newspaper cannot handle changes and cancellations of meetings relating to the life-style of our retirees. There is no local commercial broadcast service within 20 miles and most certainly no commercial broadcast operation targets this age group in its demographic plan. Obviously an LPFM

station with repetitious announcements of events and changes thereto, live coverage of community association meetings, geriatric discussions, warnings by the Sheriff's Office, etc. would be a most welcome addition to the community. There would be no purpose to broadcasting "entertainment" programming such as music, comedy, world news as those matters are adequately handled by regional broadcasters.

SECTION II: COMMENTS - Part 2

(Responding directly to the NPRM)

8. **NPRM ¶10:** The Commission has correctly sensed the need for a new entry vehicle to broadcast radio. LPFM concepts, if structured as discussed herein, should satisfy those needs within the technical capacity of the present FM broadcast band.

9. **NPRM ¶11:** Bowker believes that LPFM stations should not transmit familiar entertainment programming (eg., music, comedy) as a steady diet, but should focus on community service, primarily to convey information to interested listeners. The term "narrowcasting" may well apply to an LPFM station; examples might include repeated local activity listings that would overwhelm the "PSA Files" of a commercial broadcaster, live broadcasts of town hall or community meetings and discussions of a local issue, ethnic enrichment, or weekly services from a house of worship.

10. **NPRM ¶12:** LPFM could indeed provide new entrants the ability to address special interests shared by residents of geographically compact areas due to the the cost of establishing and operating a full-service station, lack of available Class A, B or C broadcast channels, or the reticence of existing broadcasters to make time available on their existing stations. Bowker does not support the idea of making an LPFM license available to an individual under any circumstances as explained at Paragraph 3 above.

11. **NPRM ¶13:** Bowker is not able to support the Commission's concept of authorizing stations over 100 Watts ERP under these new rules. The driving force for LPFM should not be "to attract listeners" as the Commission suggests here. LPFM should provide a service that will enrich or clarify the life style of a local neighborhood of listeners who share a common interest or concern.

12. **NPRM ¶14:** The Commission has here related higher power stations to mobile listening. Bowker respectfully points out that for many, such as those living in a retirement community, much automotive traffic is from a domicile to a local shopping center only. The writer's experience with 10-Watt stations in Vermont, Indiana and New Jersey show a substantial mobile audience tunes to such "microradio" stations. Therefore, an LP100 station with a measurably larger range would reach a substantial mobile audience.

Lastly, the coverage area of an LP1000 station is about 6 times greater than predicted for an LP100 station according to the NPRM. Thus, the assignment of one LP1000 station would preclude the introduction of many LP100 voices.

13. **NPRM ¶15:** Bowker agrees with the Commission's intent not to create new frequencies for LPFM and agrees that the allocations should be in the FM band. Otherwise the listeners would have to purchase new radio receivers and, for a Secondary Radio Service, this would not make sense.

14. **NPRM ¶16:** Bowker strongly supports the Commission's proposal that LPFM stations should not be restricted to one or more specified channels of the 88-108 MHz band. Such restriction would severely limit the availability of LPFM channels depending upon current or future Primary Service assignments of other FM broadcasting stations.

15. **NPRM ¶17:** Bowker agrees with the Commission's conclusion that any new low-power service belongs on the FM VHF band where signals are more predictable and reliable day and night and in the presence of atmospheric interference.

16. **NPRM ¶18:** Bowker has shown that LPFM should be limited to non-commercial ventures and, therefore, LPFM stations could be licensed to any of the 100 FM channels without change to the present restrictions of §73.503(a) of the rules.

17. **NPRM ¶19:** Bowker recommends that only informational or educational material be permitted for LPFM and therefore the issue of NPRM ¶19 becomes moot. If the question remains, Bowker would urge the continuance of the present non-commercial band segment to exclude any commercial operations from the lowest twenty channels.

18. **NPRM ¶20:** Bowker sees no problem permitting LPFM operators to hold licenses or STAs for the use of radio broadcast auxiliary frequencies. The live broadcast of community meetings might require such a remote pickup link.

19. **NPRM ¶21:** LPFM stations should be classed as “Secondary” services. No protection from the interference-contour-protection requirements specified in Subparts B and C of Part 73 of the rules for Class A, B or C licensed stations should be granted.

20. **NPRM ¶22:** Bowker strongly supports the Commission’s concept of “LP100” and “Microradio” services. Bowker does not support the Commission’s proposal for an LP1000 Radio Service for reasons discussed at Paragraph 5.

21. **NPRM ¶23-29:** Bowker does not support the Commission’s proposal for an LPFM Radio Service in excess of 100 Watts ERP. From the listeners’ standpoint, there is no difference in the reception capability between an LP1000 radio station and a Class A FM radio station of similar power and antenna height. It is not clear how the introduction of new and untried radio service can serve the public’s interest.

LP100 RADIO SERVICE

22. Bowker asks why there need be a distinction between the LP100 and the “Microradio” Radio Services. If in processing a new station authorization the Commission were to record the specified facilities rather than the maximum possible facilities for that class of service, many more stations could be accommodated and the Commission’s Rules would be simplified. Distance separations would still be used for determining permitted transmitter sites.

23. **NPRM ¶30:** Bowker agrees that LPFM stations should use only FCC Certified transmitting equipment but does not agree with the Commission's proposal to require a minimum power level for the LP100 Class of station because of the present availability of commercial FM exciters with a wide range of output powers and an uncertainty of future product offerings. Bowker supports the Commission's proposal for lesser operating and service requirements as detailed in Section G of the NPRM.

24. **NPRM ¶31:** Bowker supports the classification of LP100 stations as operating on a secondary basis. LPFM stations should be prepared to change their operating channel if a change in a Primary Service station calls for additional protection to their interference contours as detailed in Paragraph 4 herein.

25. **NPRM ¶32:** If stations of the LP1000 class are to be categorized as Primary Service stations, they should be granted full protection. LP100 and "microradio" stations should be secondary service stations but should be permitted to apply for a channel for which up to 10% of the area within their 60 dBu contour would be predicted to receive interference from a primary or other secondary service stations.

26. **NPRM ¶33:** Bowker agrees with the Commission that existing FM translators and boosters licensed before the adoption of LP100 rules should be provided "grandfathered" interference protection. Further, translator or booster stations for LP100 stations should not be authorized. It is the writer's experience that occasional reception problems, even in an urban area, can be addressed through care in setting up the receiving apparatus.

1-10 Watt Secondary “Microradio” Service

27. NPRM ¶34: Bowker contends that a 1-10 Watt Microradio Service is greatly needed and should prove very popular. Without question this class of license should be granted only for non-commercial users so as to avoid their use by stores for continuous advertising, eg., repetitious announcements of their specials as is now heard from in-store public address systems. Clearly, if one store were to start such broadcasts, others would follow suit thereby filling up the available FM broadcast channels in that community. This would be a terrible waste of the radio spectrum. Across the United States there are many housing clusters with their own covenants, policies, home-owner associations and local interests that have no effective way to communicate within the community. Neighborhood Watch programs could benefit from a Microradio Service. Many of these housing clusters extend only a mile or two from a central point and are in great need of a means to communicate urgent information. Monophonic transmissions would be suitable and welcome so the range of a 10-Watt station would be adequate.

28. NPRM ¶35: FCC transmitter Certification should be required in the Microradio Service. Bowker contends that the “exciter” class of transmitter, properly filtered and masked, should function well into a simple antenna system. The exciter, however, may find its way into higher power equipment on another occasion and, therefore, should meet the same rigorous out-of-band emission requirements of other FM broadcast equipment.

29. NPRM ¶36: The microradio class should be secondary to all other broadcast services including translators and booster stations regardless of license date. This applies to the present analog mode of transmission and any future digital or other

mode of transmission from primary or other secondary stations. The proliferation of microradio stations should not materially impact the potential audience of any protected station since, as the Commission here points out, the interference range of only a few hundred feet, even when multiplied several times by stations over the area of a city, would contribute insignificant interference.

30. NPRM ¶37: Bowker agrees with commenters who state that a power level of just one watt is deserving of attention in an LPFM Radio Service. In the writer's experience, clusters of condominium owners would benefit greatly from a very local radio service and with a one-watt service, several such stations could be located within a small community of condominiums. Thus, with judicious planning, three or four FM channels might serve the individual needs of a large number of clustered condo or neighborhood associations. This is also consistent with the writer's suggestion that the Commission erase the lines between "microradio" and LP100 classes of service.

31. NPRM ¶38-41: The use of minimum distance separations is useful and valid for the LPFM Radio Service. However, the Commission should not find an additional burden in adapting its computerized processing capability to permit the evaluation of precise ERP and antenna specifications submitted by applicants.

The benefit of LPFM and "Microradio" as forward looking communications services should not be limited by the Commission's present processing or data-base capabilities.

32. NPRM ¶42-50: Bowker defers to others on the matter of interference protection ratios who may have more up-to-date information on receiver specifications and proposals for digital radio services on these frequencies.

33. NPRM ¶51-56: Bowker cannot support a reduction in the transmission bandwidth or the introduction of any emission limitation of LPFM stations compared with full-service FM stations that would affect an LPFM station's ability to transmit stereophonic sound, SCA and other services may well be a significant factor in the use of such stations. Stereophonic transmission of community meetings has proven to be vastly superior in intelligibility by listeners. A useful application of SCA channels in our local community would be the repeated posting of warnings or the calendar of daily events, obituaries or service schedules, etc. Any significant reduction in bandwidth could have a devastating effect on these important ancillary services.

34. NPRM ¶57: Bowker agrees with the Commission's proposals regarding ownership but sees no reason to offer current AM station licensees an LPFM opportunity contingent upon divestiture of their AM station with the singular exception of a non-commercial AM station owner presently licensed for daytime-only operation. The Commission's proposal would not preclude a commercial chain store from operating LPFM stations across the country, one community at a time. That would be a terrible waste of spectrum. The ownership of LPFM and "Microradio" stations must be confined to not-for-profit corporations. Ownership of more than one LPFM station by any entity will surely lead to reduced local origination of programming and should be banned.

35. NPRM ¶ 58: Bowker fails to see how a lack of cross-ownership would equate to a loss of "valuable broadcast experience". In every instance of a non-commercial broadcast station in the writer's experience, experienced radio talent from the community has always volunteered its expertise to assist in technical

and programming matters. No absentee ownership of an LPFM station should be allowed; local origination, live or recorded, of the entire broadcast day should be required in the operation of the LPFM Radio Service.

36. **NPRM ¶60:** The Commission here speaks of economies of scale and Bowker sees such economies as pertaining to programming costs. This is counter to the writer's view of the LPFM Radio Service. All programming should be of substantial local origination -- including but not limited to programs appealing to an ethnic (foreign language) audience. For this there are no substantial economies of scale. The Commission's proposal would support yet another network of stations rather than supporting a true neighborhood radio service consistent with needs specified herein and by many of the early proponents of LPFM. If a program is of sufficient interest for a regional or national network's attention, it should be broadcast by full-service stations.

37. **NPRM ¶61:** Bowker feels that local origination of programs is essential to the management of the LPFM and Microradio Radio Services and, therefore, local residency by those planning the programs will be very important. Again, national multiple ownership of LPFM and Microradio stations should be avoided if the long-range full potential of the proposed new service is to be realized.

38. **NPRM ¶62-64:** Bowker sees no reason to distinguish between the characteristics of the ownership and management of an LPFM or "Microradio" station and those of a full-power broadcasting station.

39. **NPRM ¶65-67:** Bowker is not aware of any not-for-profit corporations that have been guilty of operating unlicensed broadcasting stations. For reasons stated at Paragraph 4 herein, applications for LPFM stations from individuals should not be entertained by the Commission. However, if an applicant has been guilty of abusing the Commission's Rules in the past, such applicant should not be permitted to apply for an LPFM or Microradio station license, at least during the initial filing window for the LPFM or Microradio Radio Service.

40. **NPRM ¶68:** LPFM programs should be produced specifically for the neighborhood to be served. While some non-local programming will be of interest to listeners, the purpose of the LPFM Radio Service should be clearly stated by the Commission as being an information conduit, not just another source of entertainment programming. Bowker strongly supports the Commission's view that an LPFM station should not be operated as a translator station for the reasons stated earlier.

41. **NPRM ¶69:** Bowker does not support the proposal to permit LPFM stations in excess of 100 Watts ERP and with antenna heights of 30 Meters. While any LPFM station would be able to sell advertising, it is not clear why any profit motive should come into play here. The revenue to be expected from commercial mention, such as used by non-commercial broadcast stations, should be more than sufficient to cover the costs of operating a low-power station. Any commercial use of LPFM will lead toward the use of such neighborhood stations by local chain stores for the simple broadcast of what is now heard over the in-store public address systems. What a terrible waste that would be of such limited spectrum where bona-fide information needs might otherwise be communicated.

42. **NPRM ¶70-74:** Bowker strongly supports the Commission's proposal to apply its Public Interest Programming requirements in the LPFM and Microradio Radio Service as explained throughout these Comments. The whole purpose of LPFM should be to communicate information to local residents. Environmental (safety) considerations are obviously applicable to all r.f. emissions; the spirit of the political broadcasting rules should be applicable to the LPFM Radio Service because at the moment of listening to a broadcast, the listener will make no conscious differentiation about the type of station being heard.

43. **NPRM ¶76-77:** An LP1000 station is no different to a listener from a Class A FM station and should be expected to be regulated by exactly the same rules. An LP100 or Microradio station may be excused from certain of the rules due to the very purpose of its existence. A religious organization, for example, might broadcast each of its services plus some outreach, youth or senior events, but it should not be required to be on the air any minimum number of hours per day or week. Still, if a station is used rarely it would be unconscionable to preclude another user from the channel. The Commission should encourage time sharing. Attention is invited to the extremely successful sharing of time that worked for many decades in the Chicago market between three time sharers of a single broadcast channel (1240 kHz).

44. **NPRM ¶78-83:** Bowker feels that the same time allowance for construction of new facilities should be given in the LPFM Radio Service as in current Part 73 Rules for FM broadcasting stations. Simpler construction is balanced against relative anticipated inexperience of the licensing organization. However, the

initial license term for a station should be not more than one year. This will give the Commission and the community an opportunity to evaluate the use of the channel. There can be an expectancy of renewal for the licensee the same as for existing broadcasters, but the Commission should closely monitor the administration of stations in this new service to determine that they understand their responsibilities and operate under the applicable rules and regulations. The transfer of a Construction Permit should not be permitted. If an organization elects not to construct an authorized station, the CP should be returned to the Commission for cancellation. In this way, no trafficking of CP's will be possible and the originally stated communication plan for the station will not be abused.

45. NPRM ¶84-85: The licenses of LP100 and Microradio stations should be renewable. The first license term should be not greater than one year so the Commission can weed out licensees that have lost interest in broadcasting. After the initial term, the license term in the LPFM Radio Service should be the same as for present Part 73 radio licensees.

46. NPRM ¶86: The sale of an LPFM license or station should be permitted but only for a cost equivalent to the depreciated value of the existing plant. The selling licensee should not be permitted to realize financial or other net gain from the sale or transfer.

47. NPRM ¶87: EAS requirements for all broadcast media should be the same because from the standpoint of the listener (ie., the user of EAS) there is no conscious difference between his attention to a Class C FM station and to a Microradio station.

48. **NPRM ¶88:** Station call signs are important for quickly identifying a specific broadcaster but they need not be in the familiar 3- or 4-letter call starting with K or W. The Commission should establish a new pattern of call signs that could, for example, cite the FM numeric channel followed by three letters.

49. **NPRM ¶89:** There is no obvious way the Commission is going to be able to inspect all LPFM facilities with presently funded staffing levels. Amateur Radio has found relief by recruiting and training some of its licensees to assist in licensing administration. Bowker would encourage the Commission to establish citizen groups to provide an assist to the inspection of LPFM stations.

50. **NPRM ¶90:** Any radio emission that causes harmful and impermissible interference to a licensed station should be shut down by the Commission immediately.

51. **NPRM ¶91-95:** Any form of electronic filing, including e-mail, that will reduce processing burden and time of the Commission should be encouraged. Follow-up hard-copy, original signature confirmation of approved applications should be required. Also, any assist the Commission can offer the public to produce more accurate applications (eg., coordinates, HAAT, etc.) would be welcome.

52. **NPRM ¶96-101:** Bowker does not support a short window for filing LPFM applications since many applicants will not be familiar with the Commission's practices nor be frequent readers of the Federal Register. Once a radio service is defined and application procedures established, it would be in the public

interest to permit the filing of applications at any time. Bowker expects the popularity of LPFM to develop over time as more and more not-for-profit and educational institutions learn of its potential. It would not serve the public interest to effectively limit the applicant base to the “in crowd” that has followed this proceeding.

53. **NPRM ¶102:** The “First-Come-First-Served” basis for selecting initial applicants is the only fair way to start the process. The Commission is concerned about overloading the facilities of any system for handling applications but there are many ways to avoid this. Using e-mail will clearly establish a filing time; if there is a system failure at a crucial moment this can be documented by the server to establish a filing time. Multiple e-mail addresses can be established by the Commission at no cost to spread the crush of applications; applicants in each state or region within a state would be given a specific e-mail address to send their applications.

54. **NPRM ¶103 et seq.:** Bowker has no quarrel with the Commission’s conclusions on how mutually exclusive applications would be handled, including the auctioning of channels as a last resort. It will be a terrible waste of valuable spectrum, however, if commercial interests are allowed to bid on these channels and, thereby, exclude not-for-profit organizations from fulfilling the needs for providing news / information / enrichment channels as described at the beginning of these Comments.

SUMMARY

The writer has spent 50 months in the decade of the 1990s in a motorhome traveling through the 48 contiguous states recording and reporting on the state of radio broadcasting. His conclusions are that there is plenty of commercial entertainment programming in every populated area of the country. He observes how T.I.S. stations serve a worthwhile purpose but, due to ownership restrictions and their use of the AM band, they fall short of what is needed to satisfy the news, information and enrichment needs of many people in the United States. The existing non-commercial programmers offer a wonderful plate of variety in many communities and the all-news stations throughout the country enjoy high commercial ratings and all stations though use of "Public Service Announcement" files do what they can to bring detailed attention of items to small pockets of listeners.

But it is not enough. LPFM stations of the 1-100 Watt ERP level would be able to satisfy these needs if an appropriate not-for-profit organization were to operate a non-commercial station on most day parts. It is too bad, in this writer's view, that power levels in excess of 100 Watts are being considered because the grant of one such "LP1000" station will exclude a multiple of LP100 and Microradio stations. Thus many voices will be quieted.

Bowker commends the Commission on its proposal for a Low Power Frequency Modulated Radio Service.

John D. Bowker
May 21, 1999